

Application No. 10/069,886

Art Unit 1712

February 3, 2004

Reply to Office Action Dated November 3, 2003

REMARKS

Applicants thank the Examiner for the careful attention given to the present application. Applicants note with appreciation the Examiner's indication of allowable subject matter. Applicants respectfully request the Examiner to reconsider the outstanding rejections in view of the foregoing amendments to the claims and the following remarks.

Amendments to the Specification and Claims

Several amendments to the specification have been made in order to correct typographical errors. The descriptions in the paragraphs at page 40, lines 16-19 and page 41, lines 15-18 were switched so that the ^{13}C -NMR data will follow the descriptions of the stereoisomers. It is apparent from the context of the Examples that no new matter has been added.

Periods have been added at the end of several claims. Additional amendments have also been made to some claims. Support for other amendments to claims should be readily apparent from the discussion that follows. New claims 14 - 26 have been added. Support for new claims 14-21 can be found in the following locations in the specification.

<u>Claim(s)</u>	<u>Support in Specification</u>
14-17	page 10, lines 5 and 6, and Example 1
18-22	page 10, lines 15-18

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Support for new claims 23-26 is readily apparent by reference to the claims upon which they depend.

Rejection Under 35 U.S.C. § 102(b)

Claims 1-7 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Peppiatt et al. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are respectfully requested.

Initially, it is noted that Peppiatt et al. reference is mentioned in the present specification at page 3, lines 8-18, and the present application was drafted with this reference in mind. Peppiatt et al. mentions bis(cis-3,3,5-trimethylcyclohexyl) phthalate and bis(trans-3,3,5-trimethylcyclohexyl) phthalate on page 3122. However, the present invention relates to the former bis(cis-3,3,5-trimethylcyclohexyl) phthalate and does not relate to the latter bis(trans-3,3,5-trimethylcyclohexyl) phthalate.

Peppiatt et al. mention that bis(cis-3,3,5-trimethylcyclohexyl) phthalate has a melting point of 93°C in Table 2 on page 3122. The melting point of a stereoisomer mixture, however, varies depending on the amounts of the various stereoisomers, as is shown in the Examples of the present specification. Specifically, the bis(cis-3,3,5-trimethylcyclohexyl) phthalate obtained in Example 1 of the present application shows two melting point peaks at 85°C and 94°C. The ratio of stereoisomers was determined to be $(a+b)/c = 54/46$ by analysis using

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an optical resolving column. Thus, this mixture of stereoisomers is within claim 1 of the present application. On the other hand, the bis(cis-3,3,5-trimethylcyclohexyl) phthalate reported in Comparative Example 1 in the present application (beginning on page 43) shows a melting point peak at 93°C. The ratio of stereoisomers was such that $(a+b)/c = 50/50$. Thus, the material described in Comparative Example 1 of the present application corresponds to the material that is described in Peppiatt et al. The above-discussed data demonstrate that the invention defined in claim 1 is different from the materials described in Peppiatt et al.

In addition, there is no description in Peppiatt et al. relating to three stereoisomers included in the bis(cis-3,3,5-trimethylcyclohexyl) as well as the ratio of the three stereoisomers, other than as noted above.

According to the present invention, the bis(cis-3,3,5-trimethylcyclohexyl) phthalate comprising three stereoisomers in a specific proportions is useful as, for example, a solid plasticizer in a heat-sensitive tacky adhesive, the resulting heat-sensitive tacky adhesive having markedly improved blocking resistance and other properties (page 5, lines 3 to 8).

The heat-sensitive tacky adhesive sheets according to Example 7, wherein bis(cis-3,3,5-trimethylcyclohexyl) phthalate $[(a+b)/c=54/46]$ is used, have markedly improved adhesive strength and excellent blocking

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resistance, as compared with the heat-sensitive tacky adhesive sheet according to Comparative Example 2, wherein bis(cis-3,3,5-trimethylcyclohexyl) phthalate [(a+b)/c=50/50] is used, as is shown in Table 1 on page 40. Thus, the composition of the present invention is useful for the preparation of a heat sensitive tacky adhesive having excellent adhesive strength and blocking resistance effects not described in the cited reference.

The proportion (abundance ratio) of individual stereoisomers, for example, a proportion "a+b", in bis(cis-3,3,5-trimethylcyclohexyl) phthalate of the present invention can be adjusted by appropriately setting, for example, the type of the crystallization solvent, the amount of crystallization solvent (solute concentration), and the crystallization temperature when the compound is purified by recrystallization, and can be adjusted by appropriately setting distillation conditions, such as the number of plates and reflux ratio when the compound is purified by distillation (see page 19, line 21 to page 20, line 5). These features are not described in the cited reference.

The invention defined by claim 1 recites the proportions of three stereoisomers of bis(cis-3,3,5-trimethylcyclohexyl) phthalate having Formulae (1), (2) and (3) as discussed above.

Claim 4 is directed to a composition comprising purified dl-bis(cis-3,3,5-trimethylcyclohexyl) phthalate comprising compounds of

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Formulae (1) and (2). This claim is distinct from the teaching of Peppiatt et al in that in Peppiatt et al the compounds of Formulae (1) and (2) are not purified. Rather, the compounds of Formula (1) and (2) collectively are present in the same amount as the compound of the Formula (3). Thus, the composition has not been enriched (purified) in the amounts of the compounds of Formulae (1) and (2).

Claim 5 is directed to an optically active stereoisomer having the Formula (1) or (2). The material described in Peppiatt is not optically active since the various stereoisomers have not been purified or separated from each other. Claim 5 has been amended to indicate that the compound is purified, although it is submitted that this was implicit in the original claim in light of the "optically active" recitation.

Claim 7 is directed to purified meso-bis(cis-3,3,5-trimethylcyclohexyl) phthalate represented by Formula (3). Peppiatt et al do not describe such a purified compound.

For the reasons set forth above, Peppiatt et al do not describe the production process recited in claims 2, 3 and 6.

For the foregoing reasons, it is respectfully submitted that the present application is in condition for allowance.

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Conclusion

A full and complete response has been made to all issues as cited in the Office Action. Applicants respectfully request that a timely Notice of Allowance issue for the present case.

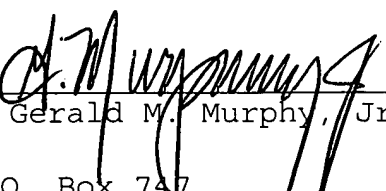
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the Gerald M. Murphy, Jr. (Reg. No. 28,977) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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